## Claims

1. A system for controlling vehicles to provide transportation services without need for human intervention, comprising:

a database including records each documenting needed transportation services;

processing circuitry performing a dispatching process including reviewing said records, locating a record indicating a need for immediate transportation service, and instructing a vehicle to provide said vehicle service; said processing circuitry further performing a monitoring process including reviewing said records and vehicle activity information to identify transportation services which are not being adequately provided; and

communication circuitry forwarding instructions produced by said dispatching process from said processing circuitry to a vehicle; said communication circuitry further providing vehicle activity information relating to said vehicle to said processing circuitry for review by said monitoring process.

2. The system of claim 1 wherein said processing circuitry is a microcomputer running a multitasking operating system, said multitasking operating system supporting both said dispatching process and said monitoring process.

3. The system of claim 1 wherein said processing circuitry is a network of computers, one computer of said network running said dispatching process and one computer of said network running said monitoring process.

4. The system of claim 1 wherein said processing circuitry performs multiple said dispatching processes in parallel and multiple said monitoring processes in parallel.

5. The system of claim 1 wherein said communications circuitry forwards instructions to a vehicle via radio communications.

6. The system of claim 1 wherein a vehicle reports information on its activities by radio communications to said communications circuitry.

7. The system of claim 1 wherein said communications circuitry forwards instructions to a vehicle and receives vehicle activity information from a vehicle via both ground-based radio communication and satellite-based radio communication.

8. The system of claim 1 further comprising satellite-based vehicle tracking circuitry for tracking locations of said vehicles,

said communication circuitry being connected to said vehicle tracking circuitry for determining vehicle activities for forwarding to said monitoring circuitry.

9. The system of claim 8 wherein a request for transportation services requests a vehicle to travel to an appointed location, and

said monitoring process reviews said vehicle activities to determine whether a vehicle has arrived at or is en route to said appointed location in deciding whether a customer request is being adequately serviced.

10. The system of claim 9 wherein a vehicle operator manually communicates the arrival of said vehicle at said appointed location to said communication circuitry, and said monitoring process determines whether said communication has been received from the vehicle operator to determine whether a customer request is being adequately serviced.

11. The system of claim 9 wherein said vehicle includes circuitry for automatically transmitting a position of said vehicle to said communication circuitry, and said monitoring process determines whether said transmitted position is similar to said appointed location to determine whether a customer request is being adequately serviced.

12. The system of claim 1 wherein said communication circuitry respectively reads and writes communication request and response records in said database,

said processing circuitry instructing a vehicle to provide services by writing a communication request in said database for later forwarding by said communication circuitry, and said processing circuitry obtaining vehicle activity information by reading response records in said database.

13. The system of claim 1 further comprising data entry circuitry for manual operation to create a record.

14. The system of claim 13 wherein said data entry circuitry is located at a remote site in telephonic communication with said database ~~server~~.

15. The system of claim 14 wherein said data entry circuitry includes a reader for reading information from an identification card used by a person requesting transportation services.

1      16. The system of claim 13 wherein said
2    data entry circuitry is a touch-tone responsive
3    telephone receiver for receiving touch-tone
4    telephone signals and creating a record therefrom.

1      17. The system of claim 1 wherein said
2    database, said processing circuitry and said
3    communication circuitry are located at a plurality
4    of locations and in telephonic communication with
5    each other.

1      18. The system of claim 1 wherein said
2    vehicles are ambulances and said records including
3    an indication of whether requested transportation
4    services must include advanced life support
5    facilities.

19. The system of claim 1 wherein said monitoring process creates exception records in said database identifying those records which are not being adequately serviced, and said system further comprises dispatcher circuitry for operation by a human dispatcher to use the exception records to locate records which are not being adequately serviced and take action with respect to such records.

20. The system of claim 1 wherein said database includes records indicating billing information associated with requested transportation services, and

said monitoring process, upon determining completion of requested services for a record, generates an invoice record in said database for billing to a customer, said invoice record including said billing information.

21. The system of claim 20 wherein said billing information includes a log of vehicle activities performed in response to a customer request.

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22. The system of claim 20 wherein said billing information includes insurance information associated with a customer receiving transportation services.

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23. The system of claim 20 wherein said billing information includes information on special handling provided to a customer along with transportation services.

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24. The system of claim 1 wherein said vehicle activity information indicates one or more of:

whether said vehicle is moving,

the velocity of said vehicle,

whether said vehicle is braking,

fuel usage of said vehicle,

whether emergency signals of said vehicle are operating, and

whether an engine of said vehicle is idling.

25. The system of claim 24 wherein said monitoring process determines from said vehicle activity information whether said vehicle is being used appropriately at times when said vehicle is not delivering transportation services, and if so creates an exception record in said database identifying the vehicle which is not being used appropriately.

26. The system of claim 24 wherein said monitoring process determines from said vehicle activity information whether said vehicle is stalled in traffic, and if so creates an exception record in said database identifying the vehicle which is stalled in traffic.

27. The system of claim 1 wherein said processing circuit further performs a system status management process including reviewing said records and vehicle activity information to determine and predict future needs for transportation services and comparing said future needs to expected availability of transportation services to identify future times at which available transportation services will not meet predicted needs.

28. The system of claim 27 wherein said system status management process creates an exception record in said database identifying future times at which available transportation services will not meet predicted needs.

29. The system of claim 27 wherein said system status management process includes instructing a vehicle to pre-position to a location where said vehicle will be better able to meet predicted future needs for transportation services.

30. The system of claim 1 wherein a dispatching process instruction to a vehicle to provide said vehicle service includes an identification of a route to be followed by said vehicle.

31. The system of claim 30 wherein said dispatching process includes selecting said route in accordance with routing demanded by governmental or insurance entities.

32. A system for controlling ambulances so as to ensure reimbursement for transportation services provided by said ambulances, comprising:

a database including records each documenting needed transportation services;

processing circuitry performing a dispatching process including reviewing said records, and locating a record indicating a need for immediate transportation service, and instructing a vehicle to provide said vehicle service, an instruction produced by said processing circuitry including an identification of a route to be followed by said vehicle, said dispatching process selecting said route in accordance with routing demanded by governmental or insurance entities in order to ensure reimbursement for transportation services provided by ambulances.

33. A system for ensuring that appropriate mileage charges are being applied to transportation services submitted for reimbursement to a governmental or insurance entity, comprising:

a database including records each documenting transportation services provided and submitted for reimbursement, said records indicating a starting and ending point of said transportation services and a mileage purportedly travelled in providing said transportation services;

processing circuitry reviewing said records, determining from a record said starting and ending points and mileage purportedly travelled, determining a shortest route from said starting point to said ending point, and comparing a mileage associated with said shortest route to said mileage purportedly travelled to determine if said mileage purportedly travelled is appropriate for said ~~services.~~

34. A system for controlling vehicles to provide transportation services, comprising:

a database including records each documenting needed transportation services requested by customers;

processing circuitry performing a system status management process including reviewing said records and current vehicle activity information to determine and predict future needs for transportation services and comparing said future needs to expected availability of transportation services to identify future times at which available transportation services will not meet predicted ~~needs~~

37 36. The system of claim 34 wherein said system status management process creates an exception record in said database identifying future times at which available transportation services will not meet predicted needs.

1         36. The system of claim 34 wherein said

2 system status management process instructs a vehicle

3 to pre-position to a location where said vehicle

4 will be better able to meet predicted future needs

5 for transportation services.

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